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EXAMINER	
SALCE, JASON P	

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2623	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/431,437	SHIGA ET AL.	
	Examiner	Art Unit	
	Jason P. Salce	2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 September 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *40-59 and 87-126* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *40-59 and 87-126* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 9/19/2007 have been fully considered but they are not persuasive.

Applicant has amended the independent claims, however, the claims still read on the Lawler reference of record (see updated rejection below).

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 40, 87, 92, 99, 105, 113 and 121 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding the independent claims, Applicant have amended the claims to recite, "*wherein said reduced size images are superimposed, via predetermined processing in a single-frame format*". The examiner notes that the previous limitations in the claim refer to the reduced size images being represented by image data (see preamble), therefore the use of the term image data is used pre-transmission and the term reduced size images or images of reduced, less than normal size is only used post reception and display by the receiving device. The examiner requests that not only the consistent use of reduced size images and image data in relation to the pre and post transmission

defined in the claim, but also consistently define the reduced size images and images of reduced, less than normal size limitations.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 87-90 and 99-103 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Lawler et al. (U.S. Patent No. 5,805,763).

Referring to claim 87, Lawler discloses image-based promotional data (EPG data) associated with programs, which are to be transmitted (see transmitter/headend in Figure 1).

Lawler also discloses generating said image-based promotional data including image data identifying corresponding programs which are to be transmitted, said image data representing reduced size images which have a display size that is less than the display size for displayable data of said programs (see Column 4, Lines 35-46 for generating EPG data at an EPG server 34 in Figure 1).

Lawler also discloses providing program data constituting at least one program currently being transmitted (see Figure 3 for the EPG data describing a program

previously and presently transmitted as well as at a future time).

Lawler also discloses combining said image-based promotional data and said program data to generate combined data (see Column 5, Lines 4-28).

Lawler also discloses transmitting the combined data (see Column 5, Lines 4-28).

Lawler further discloses that said image data is sufficient for generating said reduced size images at a receiver (see Figure 3 and the rejection of claim 40), such that said reduced size images are retrieved independent of said program data (**see again Figure 3 and Column 8, Lines 31-34 for displaying a reduced size image in the summary panel 108 only after a program in the program guide grid is selected, therefore the preview images transmitted by Lawler are clearly retrieved independently of said program data (program selected 102 in program grid)**).

Lawler also discloses superimposing said reduced size images, via predetermined processing in a single frame format, on the program data (**see Column 5, Lines 17-29 for transmitting analog programs and the digital information combined (multiplexed) in a single frame format (see Column 4, Lines 25-28 for the digital information including single frame images)**).

Lawler also discloses outputting the single-frame format reduced sized images for allocation to a unique transponder (**see Column 5, Lines 36-37 for transmitting the combined information using a satellite communication system**).

Referring to claim 88, Lawler discloses that the image-based promotional data

(EPG data) includes text data (see Figure 3).

Referring to claim 89, Lawler discloses that said text data includes title data identifying the title of the associated program (see Figure 3), broadcast data identifying data, time and broadcast channel at which said associated program is to be transmitted (see Figure 3 and Column 8, Lines 51-53) and description data providing a description of said associated program (see Figure 3 for summary panel 108 and Column 8, Lines 31-53)

Referring to claim 90, Lawler discloses providing text data associated with said at least one program currently being transmitted (see the rejection of claim 88), combining said text data with said image-based promotional data and said program data (see multiplexer in Figure 1) and transmitting the combined image-based promotional data, program data and text data (see Column 5, Lines 4-28).

Referring to claims 99-102, see the rejection of claims 87-90, respectively.

Referring to claim 103, see the rejection of claim 101 and further note Figure 3 of Lawler for specifying a category (see ESPN programs which are sports programs).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 40-52, 57-59, 92-98, 105-110, 112-118 and 120-126 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et al. (U.S. Patent No. 5,805,763) in view of Marshall et al. (U.S. Patent No. 5,502,504).

Referring to claim 40, Lawler discloses an apparatus for receiving EPG (see Column 4, Lines 35-46) and program data (see Column 5, Lines 17-29) transmitted on plural broadcast channels (see Column 5, Lines 4-28), said EPG data including image data representing images of reduced, less than normal size to identify respective programs (see Figure 3 for each program tile 88 containing an image in the form of a square or rectangle containing text, therefore presenting a reduced, less than normal size to identify respective programs and further note Column 8, Lines 51-53 for icons also being presented in each program tile along with the text), which currently are and will be transmitted on several broadcast channels (see again Column 5, Lines 4-28 for transmitting the EPG data and program data on several broadcast channels and Figure 3 for the program displayed in the EPG representing programs that are currently and will be transmitted) and said program data including video and audio data of plural programs currently being transmitted on respective broadcast channels (see again Column 5, Lines 17-29).

Lawler also discloses receiving means for receiving the program data transmitted on different broadcast channels and the EPG transmitted with said program data (see Column 5, Lines 4-29).

Lawler also discloses separating means for separating the received EPG data from the received program data (see Column 5, Lines 57-67).

Lawler also discloses storage means for storing the separated EPG data (see Column 7, Lines 19-28).

Lawler also discloses display means for displaying a program represented by the separated program data (see Column 6, Lines 15-28).

Lawler also discloses read-out means for selectively retrieving said EPG data from said storage means (see Column 7, Lines 10-19 and Figures 3 and 6 for displaying different program guides on the display therefore the receiver must selectively retrieve specific EPG data from the storage means).

Lawler also discloses that said image data is sufficient for generating said reduced size images at said receiving means, such that said reduced size images are retrieved independent of said program data (**see again Figure 3 and Column 8, Lines 31-34 for displaying a reduced size image in the summary panel 108 only after a program in the program guide grid is selected, therefore the preview images transmitted by Lawler are clearly retrieved independently of said program data (program selected 102 in program grid)**).

Lawler also discloses superimposing said reduced size images, via predetermined processing in a single frame format, on the program data (**see Column**

5, Lines 17-29 for transmitting analog programs and the digital information combined (multiplexed) in a single frame format (see Column 4, Lines 25-28 for the digital information including single frame images)).

Lawler also discloses outputting the single-frame format reduced sized images for allocation to a unique transponder (**see Column 5, Lines 36-37 for transmitting the combined information using a satellite communication system**).

Although Lawler clearly discloses the functionality to provide an EPG superimposed over a displayed program (see Column 6, Lines 20-28), Lawler fails to specifically disclose means for displaying on said display means said images of reduced, less than normal size represented by said retrieved EPG data in superposition over the displayed program.

Marshall discloses means for displaying on said display means said images of reduced, less than normal size represented by said retrieved EPG data in superposition over the displayed program (see Figures 5-9).

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the displayed EPG, as taught by Lawler, using the superposition technique, as taught by Marshall, for the purpose of providing a program guide display that will allow the viewer to select a program in a program guide while avoiding missing key portions of the television program currently being displayed while the user decides which channel to select from the program guide (see Column 1, Lines 11-19 of Marshall).

Referring to claim 41, Lawler discloses that the received EPG data further includes text data representing information associated with each program identified by said image data (see Figure 3 for each image (program tile 88) containing text data), and said read-out means is operable to retrieve said text data from said storage means and supply the retrieved text data to said display means (see Column 7, Lines 10-58).

Referring to claim 42, Lawler discloses image selecting means for selecting one of the displayed reduced size images to cause said read-out means to retrieve from said storage means the text data associated with the program identified by said selected reduced size image for display therewith (see Column 8, Lines 31-53).

Claim 43 corresponds to claim 42, where Lawler discloses that said text data includes title data identifying the title of the associated program (see Figure 3), broadcast data identifying data, time and broadcast channel at which said associated program is to be transmitted (see Figure 3 and Column 8, Lines 51-53) and description data providing a description of said associated program (see Figure 3 for summary panel 108 and Column 8, Lines 31-53).

Claim 44 corresponds to claim 42, where Lawler discloses that the image selecting means comprises a cursor and cursor control means operable by a user to position said cursor at a desired one of the displayed reduced size images and thereby select said desired reduced size image (see focus frame 102 in Figure 3).

Claim 45 corresponds to claim 40, where Lawler discloses that the retrieved EPG data identifies respective programs, which currently are being transmitted (see Figure 3 for displaying programs that are broadcast at a past, present and future time) and further comprises image selecting means for selecting one of the displayed reduced size images (see again focus frame 102 in Figure 3), and tuning means for tuning said apparatus to the broadcast channel which transmits the program identified by the selected reduced size image (see Figure 5 and Column 10, Lines 50-53).

Claim 46 corresponds to claim 40, where Lawler discloses that said text data comprises program table data formed of title, data, time and broadcast channel data for each of the respective programs to be transmitted (see the rejection of claim 43).

Claim 47 corresponds to claim 46, where Lawler discloses that said text data additionally comprises program content data providing a summary of the content of each of the respective programs to be transmitted (see the rejection of claim 43).

Claim 48 corresponds to claim 47, where Lawler discloses that said program table data is associated with programs currently being transmitted and programs to be transmitted during a predetermined time period (see the rejection of claim 45), and said program content data is associated with said program currently being transmitted and said programs to be transmitted during a fraction of said predetermined time period (see

Figure 3 for displaying Kung Fu for an hour and Trailside for a half-hour, which is a fraction of Kung Fu's predetermined time period).

Claim 49 corresponds to claim 47, where Lawler discloses that the received EPG data is multiplexed with the received program data (see Column 5, Lines 22-27 and multiplexing system 42 in Figure 1).

Claim 50 corresponds to claim 49, where Lawler discloses all of the limitations in claim 49, but fails to teach that the received program data is compressed and the receiving means includes decompressing means for expanding the compressed program data.

The examiner takes Official Notice that it is well known to compress broadcast video to a client.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the broadcast video transmission, as taught by Lawler and Marshall, to a compressed broadcast video transmission, for the purpose of conserving bandwidth, which results in an increased bandwidth in the downstream direction for transmitting additional video, audio or data streams.

Claim 51 corresponds to claim 49, where Lawler discloses that the EPG data and program data are received via satellite transmission channels (see Column 3, Lines 56-57), and wherein the separating means comprises demultiplexing means for

demultiplexing each satellite transmission channel to recover said EPG data and the program data transmitted on each of the said broadcast channels (see Figure 1 for multiplexing means for sending a multiplexed transmission to the client device, therefore a the signal must be demultiplexed upon receipt by the client in order to properly process the signal).

Claim 52 corresponds to claim 51, where Lawler discloses a tuning means for tuning said apparatus to a selected broadcast channel (see Figure 2) and a memory means for storing the recovered program data transmitted on the selected broadcast channel and means for reading out the program data stored in said memory means and supplying same to said display means to display said read out program data (see memory 60 in Figure 2 and Figure 3 for displaying the EPG data stored).

Claim 57 corresponds to claim 40, where Lawler further teaches a memory for pre-storing predetermined display indicia (see Column 6, Lines 19-27 and Column 8, Lines 51-53), said receiving means being operable to receive as part of said EPG data, access information for accessing selected display indicia (see again Figure 3 for the EPG containing data to access programs), said read-out means being operable to read out said selected display indicia in response to the received access information (see again Column 8, Lines 51-53) and said display means being operable to display said selected display indicia in superposition over said displayed program (see Figure 3 and the rejection of claim 40 for Marshall teaching the superposition functionality).

Claim 58 corresponds to claim 41, where Lawler discloses display means that is operable to display a text window (see summary panel 108 in Figure 3) superimposed over said displayed program (see the rejection of claim 40 for Marshall teaching the superposition functionality), and further comprises image selecting means for selecting one of the displayed reduced size images to cause said read-out means to retrieve said text data representing information associated with the program identified by said selected reduced size image for display in said text window (see again summary panel 108 in Figure 3).

Claim 59 corresponds to claim 58, where Lawler discloses that the summary panel 108 of Figure 3 teaches displaying the title of said identified program (see Figure 3), but fails to teach displaying the broadcast channel over which said identified program is transmitted.

The examiner takes Official Notice that it is well known in the prior art to display a title and broadcast channel of a program in a summary portion an EPG.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the EPG with summary text window, as taught by Lawler and Marshall, with the text window that displays the broadcast channel, for the purpose of allow the user to visually confirm that the selected program resides on the proper channel.

Referring to claims 92-98, see the rejection of claims 40, 45, 41-43, 51 and 50, respectively.

Referring to claims 105-110 and 112, see the rejection of claim 40-41, 43, 42, 51, 50 and 57, respectively.

Referring to claim 113, see the rejection of claims 40 and 87 for teaching both the transmitter and receiver limitations.

Referring to claim 114, see the rejection of claim 88.

Referring to claim 115, see the rejection of claim 43.

Referring to claim 116, see the rejection of claim 91.

Referring to claim 117, see the rejection of claim 42.

Referring to claim 118, see the rejection of claim 50.

Referring to claim 120, see the rejection of claim 57.

Referring to claim 121, see the rejection of claims 40 and 87 for teaching both the transmitter and receiver limitations.

Referring to claim 122, see the rejection of claim 88.

Referring to claim 123, see the rejection of claim 43.

Referring to claim 124, see the rejection of claim 91.

Referring to claim 125, see the rejection of claim 50.

Referring to claim 126, see the rejection of claim 57.

4. Claims 53-56, 111 and 119 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et al. (U.S. Patent No. 5,805,763) in view of Marshall et al. (U.S. Patent No. 5,502,504) in further view of Hendricks et al. (U.S. Patent No. 5,600,364).

Referring to claim 53, Lawler discloses transmitting a plurality of broadcast channel to the interactive controller 18, as well as displaying a program guide with images that represent each channel broadcasted to the viewer (see Figure 3 and the rejection of claim 40), however, Lawler and Marshall fail to teach that one of the channels broadcasted to the viewer is a promotional channel and the program data transmitted thereon is promotional video and audio data representing particular programs transmitted on several other broadcast channels.

Hendricks discloses a plurality of promotional channels transmitted to the viewer (see Figure 20b for channels 101-109 being commercial channels), where the promotional channel provides video and audio data to the viewer on each channel (see Column 36, Lines 51-57), and further note that the promotional video and audio data is representative of the programs that were selected by the user and sent to the headend for processing by the central facility (see Figure 17 and Column 34, Lines 40-47), therefore the promotional channel shows promotional that represent particular programs that were viewed/transmitted on several other channels.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify one of the plurality of broadcast channel transmitted from the central node 12, as taught by Lawler and Marshall, to include a promotional

channel, as taught by Hendricks, for the purpose of targeting specific video/audio and commercial/promotional video/audio to specific viewers/consumers (see Column 5, Lines 34-39 of Hendricks).

Claim 54 corresponds to claim 53, where Marshall teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claim 40), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by Hendricks) is tuned to by the interactive station controller 18 in Figure 2 of Lawler, then the superpostioned program guide would be overlaid over the tuned promotional channel.

Claim 55 corresponds to claim 53, where Matthews teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claim 40), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by Hendricks) is tuned to by the interactive station controller 20 in Figure 2 of Lawler, then the superpostioned program guide would be overlaid over the tuned promotional channel and the table would be representative of programs to be transmitted on a selected non-promotional broadcast channel (see Figure 3 of Lawler).

Claim 56 corresponds to claim 53, where Lawler teaches that the display means is operable to display the retrieved text data in superposition over a displayed video channel (see the rejection of claim 40), and again, see the rejection of claim 53 for Hendricks modifying one of the video channel to include a promotional video channel, therefore if one of the promotional channel (taught by Hendricks) is tuned to by the interactive station controller 20 in Figure 2, then the superpostioned program guide would be overlaid over the tuned promotional channel as a description (the program guide itself), which is representative of a selected program to be transmitted on a selected non-promotional broadcast channel (see Figure 3 of Lawler).

Referring to claim 111, see the rejection of claim 54.

Referring to claim 119, see the rejection of claim 54.

5. Claims 91 and 104 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawler et al. (U.S. Patent No. 5,805,763)

Referring to claim 91, Lawler discloses all of the limitations in claim 87, but fails to teach but fails to teach that the received program data is compressed and the receiving means includes decompressing means for expanding the compressed program data.

The examiner takes Official Notice that it is well known to compress broadcast video to a client.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art, to modify the broadcast video transmission, as taught by Lawler, to a compressed broadcast video transmission, for the purpose of conserving bandwidth, which results in an increased bandwidth in the downstream direction for transmitting additional video, audio or data streams.

Referring to claim 104, see the rejection of claim 91.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason P. Salce whose telephone number is (571) 272-7301. The examiner can normally be reached on M-F 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on (571) 272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jason P Salce
Primary Examiner
Art Unit 2623

November 29, 2007

JASON SALCE
PRIMARY PATENT EXAMINER